RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/539,402
Source: PCT
Date Processed by STIC: 6/27/05

ENTERED

PCT

RAW SEQUENCE LISTING DATE: 06/27/2005
PATENT APPLICATION: **US/10/539,402** TIME: 11:14:00

Input Set : **A:\P10138-SEQ.txt**
Output Set: **N:\CRF4\06272005\J539402.raw**

```
      3 <110> APPLICANT: Xerion Pharmaceuticals AG
      4       Tufts University
      6 <120> TITLE OF INVENTION: Neuropilin-1 Inhibitor
      8 <130> FILE REFERENCE: XE12EPC
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/539,402
C--> 11 <141> CURRENT FILING DATE: 2005-06-17
     13 <150> PRIOR APPLICATION NUMBER: US 60/435,893
     14 <151> PRIOR FILING DATE: 2002-12-20
     16 <150> PRIOR APPLICATION NUMBER: EP 03000615
     17 <151> PRIOR FILING DATE: 2003-01-15
     19 <160> NUMBER OF SEQ ID NOS: 108
     21 <170> SOFTWARE: PatentIn version 3.1
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 269
     25 <212> TYPE: PRT
     26 <213> ORGANISM: mouse
     28 <400> SEQUENCE: 1
     30 Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
     31 1               5                  10                  15
     34 Leu Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Val Thr Ser Tyr
     35             20                  25                  30
     38 Asp Ile Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
     39         35                  40                  45
     42 Gly Trp Ile Tyr Pro Gly Asp Gly Ser Thr Lys Tyr Asn Glu Lys Phe
     43     50                  55                  60
     46 Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Val Tyr
     47 65                  70                  75                  80
     50 Met Gln Leu Ser Ser Leu Thr Ser Glu Asn Ser Ala Val Tyr Phe Cys
     51                 85                  90                  95
     54 Ala Arg Gly Gly Lys Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
     55             100                 105                 110
     58 Thr Val Ser Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
     59         115                 120                 125
     62 Gly Gly Ser Ala Leu Asp Ile Val Met Thr Gln Ser Pro Lys Phe Met
     63     130                 135                 140
     66 Ser Thr Ser Val Gly Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln
     67 145                 150                 155                 160
     70 Asn Val Ala Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser
     71                 165                 170                 175
     74 Pro Lys Pro Leu Thr Tyr Ser Ala Ser Phe Arg Ser Ser Gly Val Pro
     75             180                 185                 190
     78 Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
     79         195                 200                 205
```

RAW SEQUENCE LISTING DATE: 06/27/2005
PATENT APPLICATION: US/10/539,402 TIME: 11:14:00

Input Set : A:\P10138-SEQ.txt
Output Set: N:\CRF4\06272005\J539402.raw

```
82 Ser Asn Val Gln Ser Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr
83     210                 215                 220
86 Asn Ser Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
87 225                 230                 235                 240
90 Ala Ala Ala Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu Glu Pro Arg
91                 245                 250                 255
94 Gly Ala Ala Ser Ala Trp Ser His Pro Gln Phe Glu Lys
95             260                 265
98 <210> SEQ ID NO: 2
99 <211> LENGTH: 288
100 <212> TYPE: PRT
101 <213> ORGANISM: mouse
103 <400> SEQUENCE: 2
105 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
106 1               5                   10                  15
109 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
110             20                  25                  30
113 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
114         35                  40                  45
117 Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
118     50                  55                  60
121 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
122 65                  70                  75                  80
125 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
126                 85                  90                  95
129 Ala Arg Asp Ser Gly Leu Gln Gln Gly Pro Arg Arg Arg Gly Ala Arg
130             100                 105                 110
133 Val Asn Phe Ser Tyr Tyr Gly Leu Asp Val Trp Gly Arg Gly Thr Thr
134         115                 120                 125
137 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
138     130                 135                 140
141 Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Ala Ser
142 145                 150                 155                 160
145 Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Asn Ser
146                 165                 170                 175
149 Asn Ile Gly Arg Asn Tyr Val Phe Trp Tyr Gln Gln Phe Pro Gly Thr
150             180                 185                 190
153 Ala Pro Lys Ile Leu Ile Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val
154         195                 200                 205
157 Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala
158     210                 215                 220
161 Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser
162 225                 230                 235                 240
165 Trp Asp Asp Ser Leu Thr Trp Val Phe Gly Gly Gly Thr Lys Val Thr
166                 245                 250                 255
169 Val Leu Gly Ala Ala Ala Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu
170             260                 265                 270
173 Glu Pro Arg Gly Ala Ala Ser Ala Trp Ser His Pro Gln Phe Glu Lys
174         275                 280                 285
```

RAW SEQUENCE LISTING DATE: 06/27/2005
PATENT APPLICATION: **US/10/539,402** TIME: 11:14:00

Input Set : **A:\P10138-SEQ.txt**
Output Set: **N:\CRF4\06272005\J539402.raw**

<210> SEQ ID NO: 3
<211> LENGTH: 810
<212> TYPE: DNA
<213> ORGANISM: mouse
<400> SEQUENCE: 3
gaggtccagc tgcaacagtc tggacctgag ctggtgaagc ctggggcttt agtgaagata 60
tcctgcaagg cctcgggata caccgtcaca agctacgata taaactgggt gaagcagagg 120
cctggacagg gacttgagtg gattggatgg atttatcctg gagatggtag tactaagtac 180
aatgagaaat tcaagggcaa ggccacactg actgtagaca aatcctccac cacagtctac 240
atgcagctca gcagcctgac ttctgagaac tctgcagtct atttctgtgc aagaggtggt 300
aaatactttg actactgggg ccaaggcacc actctcacag tgtcgacagg tggaggcggt 360
tcaggcggag gtggctctgg cggtggcgga agtgcactcg acattgtgat gacacagtct 420
ccaaaattca tgtccacatc agtaggagac agggtcagcg tcacctgcaa ggccagtcag 480
aatgtggcta ctaatgtagc ctggtatcaa cagaaaccag ggcaatctcc taaaccactg 540
acttactcgg catccttccg gtccagtgga gtccctgatc gcttcacagg cagtggatct 600
gggacagatt tcactctcac catcagcaat gtgcagtctg aagacttggc agagtatttc 660
tgtcagcaat ataacagcta tccgtacacg ttcggagggg ggaccaagct ggaaataaaa 720
gcggccgcag gtgcgccggt gccgtatcca gatccgctgg aaccgcgtgg ggccgcaagc 780
gcttggagcc acccgcagtt cgaaaaataa 810
<210> SEQ ID NO: 4
<211> LENGTH: 867
<212> TYPE: DNA
<213> ORGANISM: mouse
<400> SEQUENCE: 4
gaggtgcagc tgttggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttagc agctatgcca tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtggtag cacatactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gcgagactcg 300
gggctacagc agggaccccg ccgaagaggg gcccgagtaa atttctccta ctacggtctg 360
gacgtctggg ggcgggggac cacggtcacc gtctcgagtg gaggcggcgg ttcaggcgga 420
ggtggctctg gcggtggcgg aagtgcacag gctgtgctga ctcagccgtc ctcagcgtct 480
gggacccccg ggcagagggt caccatctct tgttctggaa gcaactccaa catcggacgc 540
aattatgtat tctggtacca gcagttccca ggaacggccc ccaaaatcct catctacagg 600
aacaatcagc ggccctcagg ggtccctgac cgattctctg gctccaagtc tggcacatca 660
gcctccctgg ccatcagtgg gctccggtcc gaggatgagg ctgattatta ctgtgcatca 720
tgggatgaca gcctgacttg ggtgttcggc ggagggacca aggtcaccgt cctaggtgcg 780
gccgcaggtg cgccggtgcc gtatccagat ccgctggaac cgcgtggggc cgcaagcgct 840
tggagccacc cgcagttcga aaaataa 867
<210> SEQ ID NO: 5
<211> LENGTH: 246
<212> TYPE: PRT
<213> ORGANISM: human
<400> SEQUENCE: 5
Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Ile Ala
1 5 10 15
Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
20 25 30
Met Gly Arg Ile Asn Pro Asn Thr Gly Gly Ile Asn Leu Ala Gln Lys

RAW SEQUENCE LISTING DATE: 06/27/2005
PATENT APPLICATION: US/10/539,402 TIME: 11:14:00

Input Set : A:\P10138-SEQ.txt
Output Set: N:\CRF4\06272005\J539402.raw

```
265         35                  40                  45
268 Phe Gln Gly Arg Val Thr Val Thr Arg Asp Thr Ser Ile Ser Thr Ala
269     50                  55                  60
272 His Met Glu Leu Ser Arg Leu Ser Ser Asp Asp Thr Ala Val Tyr Tyr
273 65                  70                  75                  80
276 Cys Ala Arg Glu Arg Ile Val Pro Ala Gly Leu Arg Asn Arg Gly Met
277                 85                  90                  95
280 Val Thr Ala Val Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr
281             100                 105                 110
284 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
285         115                 120                 125
288 Gly Ser Ala Gln Ser Val Val Thr Gln Pro Pro Ser Met Ser Gly Thr
289     130                 135                 140
292 Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Arg Ser Asn Ile
293 145                 150                 155                 160
296 Gly Arg Asn Tyr Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro
297                 165                 170                 175
300 Lys Leu Leu Ile Tyr Arg Asn Asn Glu Arg Pro Ser Gly Val Pro Asp
301             180                 185                 190
304 Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser
305         195                 200                 205
308 Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp
309     210                 215                 220
312 Asp Ser Leu Ser Gly Thr Trp Val Phe Gly Gly Gly Thr Lys Leu Thr
313 225                 230                 235                 240
316 Val Leu Gly Ala Ala Ala
317                 245
320 <210> SEQ ID NO: 6
321 <211> LENGTH: 248
322 <212> TYPE: PRT
323 <213> ORGANISM: human
325 <400> SEQUENCE: 6
327 Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg
328 1               5                   10                  15
331 Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser
332             20                  25                  30
335 Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile
336         35                  40                  45
339 Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg
340     50                  55                  60
343 Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met
344 65                  70                  75                  80
347 Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly
348                 85                  90                  95
351 Gly Gly Arg Tyr Asp Ser Ser His Gly Phe Asp Ser Trp Gly Arg Gly
352             100                 105                 110
355 Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
356         115                 120                 125
359 Ser Gly Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro
```

RAW SEQUENCE LISTING DATE: 06/27/2005
PATENT APPLICATION: US/10/539,402 TIME: 11:14:00

Input Set : A:\P10138-SEQ.txt
Output Set: N:\CRF4\06272005\J539402.raw

```
360     130                 135                 140
363 Ser Val Ser Val Ala Pro Gly Glu Thr Ala Thr Ile Thr Cys Gly Gly
364 145                 150                 155                 160
367 Arg Ser Leu Gly Ser Lys Val Val His Trp Tyr Gln Gln Lys Pro Gly
368                 165                 170                 175
371 Gln Ala Pro Thr Leu Val Ile Tyr Tyr Asp Ser Val Arg Pro Ser Gly
372             180                 185                 190
375 Val Pro Glu Arg Phe Ser Ala Ser Asn Ser Arg Leu Ser Ala Thr Leu
376         195                 200                 205
379 Thr Val Ser Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln
380     210                 215                 220
383 Val Trp Asp Arg Ser Ser Asp His Tyr Val Phe Gly Thr Gly Thr Lys
384 225                 230                 235                 240
387 Leu Thr Val Leu Gly Ala Ala Ala
388                 245
391 <210> SEQ ID NO: 7
392 <211> LENGTH: 248
393 <212> TYPE: PRT
394 <213> ORGANISM: human
396 <400> SEQUENCE: 7
398 Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu
399 1               5                   10                  15
402 Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met
403             20                  25                  30
406 Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala
407         35                  40                  45
410 Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly
411     50                  55                  60
414 Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
415 65                  70                  75                  80
418 Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
419                 85                  90                  95
422 Asp Trp Arg Trp Gln Gln Phe Gly Gly Trp Phe Asp Pro Trp Gly Arg
423             100                 105                 110
426 Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
427         115                 120                 125
430 Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr Leu Thr Gln Ser
431     130                 135                 140
434 Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Thr Ala Thr Leu Phe Cys
435 145                 150                 155                 160
438 Arg Ala Ser Gln Ser Val Arg Asn Asn Leu Val Trp Tyr Gln Gln Lys
439                 165                 170                 175
442 Leu Gly Gln Ala Pro Arg Leu Leu Ile Phe Gly Ala Ser Thr Arg Ala
443             180                 185                 190
446 Ser Gly Ile Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe
447         195                 200                 205
450 Ser Leu Thr Ile Thr Lys Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr
451     210                 215                 220
454 Cys Gln Arg Tyr Gly Gly Phe Pro Ile Thr Phe Gly Gln Gly Thr Arg
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/539,402

DATE: 06/27/2005
TIME: 11:14:01

Input Set : A:\P10138-SEQ.txt
Output Set: N:\CRF4\06272005\J539402.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date